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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,115	10/30/2000	Akihisa Horiuchi	865.4345 DI	8783

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EXAMINER

THOMPSON, TIMOTHY J

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 01/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	Attendant(s)
09/698,115	HORIUCHI, AKIHISA
Examiner	Art Unit
Timothy J Thompson	2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 12-18,20,23-26 and 28-45 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 12-18,20,23-26,28-34,36-38 and 40-43 is/are allowed.  
 6) Claim(s) 44 and 45 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.                    6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over a. Mukaiya et al.(U.S. Patent No. 6,226,130 B1) in view Uzawa(U.S. Patent No. 5,798,872).

Regarding claim 44, Mukaiya et al. discloses a first lens unit of positive refractive power(fig 1, L1), a second lens unit of negative refractive power having including three negative lenses(example 1, r6-r9 and r12-r13) and one positive lens(example 1, r10-r11), a third lens unit of positive refractive power(fig 1, L3) with the third lens unit having a positive lens(table 1, r16-r17) and a fourth lens unit of positive refractive power(fig 1, L4), the fourth lens unit having a cemented lens being made of a positive lens and a negative lens, the negative lens of the cemented lens being cemented with the image side of the positve lens of the cemented lens(examople one r23-r25). Mukaiya et al. does not disclose at least one of the three negative lenses and one positive lens being an aspherical lens, or the positve lens in the third lens unit has an an aspherical surface. However,

Uzawa discloses using an aspherical surface in both the second and third lens units(embodiment 1) further stating that any lens surface in both the second and third lens units can be used for placing an aspherical surface on(col 5, lines 39-55). It would have been obvious to one skilled in the art to place an aspherical surface on a lens surface in the second lens group and an aspherical surface on the surface of the object side the positive lens in the third lens unit, as shown by Uzawa, in the lens system of Mukaiya et al., since as shown by Uzawa, placing an aspherical surface in the second lens group and an aspherical surface on the surface of the object side the positive lens in the third lens unit is commonly done so as to correct for aberrations.

Regarding claim 45, Mukaiya et al. discloses an image pickup( fig 1, image pickup) receiving an image formed by the zoom lens(fig 1).

### ***Allowable Subject Matter***

Claims 12-18, 20, 23-26, 28-34, 36-38, 40-43 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art taken either singularity or in combination fails to anticipate or fairly suggest the limitations of the independent claim, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 12, 23, 36-38, 41, 42, with the important features being the mathematical limitations

pertaining to the radii of curvature of the fourth and fifth lens surface, the relationship of the focal length of F3/FA, B4T, vn, vp and Nn.. Therefore, claims 12-18, 20, 23-26, 28-34, 36-38, 40-43 are allowed.

### ***Response to Arguments***

Regarding the applicant's argument pertaining to the cited prior art and how they pertain to the newly submitted claim 44. The arguments are moot since a new patent was used in conjunction with previously cited prior art. However, the applicant's argument, that there was no showing of motivation for combining the prior art of Mukaiya et al. and Uzawa, is not persuavise. Uzawa was used to introduce aspherical surfaces to the lens system of Mukaiya et al.. Placing aspherical surfaces on lenses is very well known in the art, so as to correct for aspherical aberrations. Additionaly, it is well known to place aspherical surfaces on any surface of a lens system. In light of these facts, placing an aspherical surface on any surface of a lens system is well known and simply not novel.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Thompson whose telephone number is (703) 305-0881. If the examiner can not be reached his supervisor, Georgia Epps, can be reached on (703) 308-4883.

T.J.T.

1/15/03



Georgia Epps  
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